

ABSTRACT OF THE DISCLOSURE

A cerium-doped garnet phosphor including a second phase of an alkali metal or alkaline earth metal aluminate. The second phase imparts improved emission efficiency but without 5 changing the wavelength of emission. These phosphors are useful to form a white light source together with a blue or ultraviolet light-emitting LED. The phosphors are applied to the LED by forming a phosphor slurry with a polymerizable material in a solution, coating the exposed surface of the LED 10 with a predetermined amount of the slurry, and polymerizing the polymerizable material.